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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,193	02/02/2001	Takatoshi Okagawa	3815-113	2812

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WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER &
SEELEY)
60 EAST SOUTH TEMPLE
1000 EAGLE GATE TOWER
SALT LAKE CITY, UT 84111

EXAMINER

TON, ANTHONY T

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/762,193

Applicant(s)

OKAGAWA ET AL.

Examiner

Anthony T Ton

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 9-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3,6 and 10.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. **Claims 9, 10 and 11** are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only, and/or, cannot depend from any other multiple dependent claim. Wherein, the **claim 9** depends on any one of claims 6-8, but the claim 8 depends on claim 6 or 7; the **claim 10** depends on any one of claims 6-8, but the claim 8 depends on claim 6 or 7; and the **claim 11** depends on any one of claims 1-10, but the claim 4 depends on claim 2 or 3, the claim 5 also depends on claim 2 or 3, the claim 8 depends on claim 6 or 7, claim 9 depends on any one of claims 6-8, and claim 10 also depends on any one of claims 6-8. See MPEP § 608.01(n). Accordingly, **the claims 9, 10 and 11 have not been further treated on the merits.**

Claim Rejections - 35 USC § 112

2. The following is a quotation of the **second paragraph** of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. **Claims 2-8, 12-16 and 18** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) **In Claim 2:**

- recites the limitations "**the area**" in **line 6**. There are insufficient antecedent basis for these limitations in the claim.

- recites the limitations "**the transmission route**" in **line 17**. There are insufficient antecedent basis for these limitations in the claim.

b) In Claim 6:

- recites the limitations "**the transmission route**" in **line 5**. There are insufficient antecedent basis for these limitations in the claim.

c) In Claim 7:

- recites the limitations "**the transmission routes**" in **line 11**. There are insufficient antecedent basis for these limitations in the claim.

d) In Claim 12:

- recites the limitations "**the area**" in **line 6**. There are insufficient antecedent basis for these limitations in the claim.
- recites the limitations "**the transmission route**" in **line 20**. There are insufficient antecedent basis for these limitations in the claim.

e) In Claim 14:

- recites the limitations "**the party mobile station**" in **lines 7-8**. There are insufficient antecedent basis for these limitations in the claim.

f) In Claim 18:

- recites the limitations "**the junction routing node**" in **lines 6-7**. There are insufficient antecedent basis for these limitations in the claim.
- recites the limitations "**the transmission routes**" in **line 7**. There are insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1, 2, 6, and 20** are rejected under 35 U.S.C. 102(b) as being anticipated by **Perkins et al.** (EP Patent No. **EP 0,578,041**) (IDS #6), hereinafter referred to as Perkins.

a) **In Regarding to Claim 1: Perkins disclosed** a mobile communications network comprising:

one or more routing nodes for receiving data to which the IP address of a mobile station is added, and for carrying out routing of the data in accordance with routing information (*see Fig.2: blocks 18 and 16s (routing nodes); block 20a MH/BAS IP addresses (routing information), and col.6 lines 39-56 (IP-address))*); and

one or more edge nodes for receiving the data routed by said routing nodes, and for transmitting the data to the mobile station corresponding to the IP address of the mobile station added to the data (*see Fig.2: blocks 12s (edge nodes) and 10s (mobile stations), and col.7 lines 11-54*).

b) **In Regarding to Claim 2: Perkins further disclosed** the mobile communications network as claimed in claim 1, further comprising:

a location information server for managing information about correspondence between the IP address of the mobile station and the IP address of the edge node that supervises an area visited by the mobile station (*see Fig.2: blocks 20 MR and 20a*),

wherein

said routing nodes include a gate node (*see Fig.2: block 18 GW*);

said gate node retrieves, by accessing said location information server, the IP address of the edge node supervising the area visited by the mobile station corresponding to the IP address of the mobile station added to the received data, and adds the IP address of the edge node to the received data (*see col.7 lines 31-54: wherein the IP address of each MH 10 is associated with one or more IP addresses of the BAS 12s (the IP address of the edge node), and col.9 lines 2-21: it follows that forwarding of the response packets is determined by the addresses of specified by the LSR option, i.e. the addresses of the BAS(s) 12 of the cell(s) presently serving the MH 10 (hence, it's inherently, adds the IP address of the edge node to the received data)*);

said routing information includes information about correspondence between the IP address of the edge node and the transmission route (*see Fig.2: block 20a, BAS (the IP addresses of edge node), col.8 line 30-col.9 line 1: Route Data and recorded route (transmission route)*); and

said routing nodes carry out the routing of the received data in accordance with the IP address of the edge node added to the received data and the routing information (*see Fig.2: block 20a, MH (the IP addresses of mobile station) and BAS (the IP addresses of edge node), col.8 line 30-col.9 line 1: Route Data (routing information)*).

c) In Regarding to Claim 6: Perkins further disclosed the mobile communications network as claimed in claim 1, wherein said routing information includes information about correspondence between the IP address of the mobile station and a transmission route, and wherein said routing nodes carry out the routing of the received data in accordance with the IP

address of the mobile station added to the received data and the routing information (*see Fig.2: block 20a, MH (the IP addresses of mobile station), col.8 line 30-col.9 line 1: Route Data and recorded route (transmission route)*)).

d) **In Regarding to Claim 20:** This claim is rejected for the same reasons as claim 1 because the apparatus in the communications network in claim 1 can be used to practice the method steps of this claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claim 4/2 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Perkins** (EP Patent No. **EP 0,578,041**) in view of **Kumaki et al.** (US Patent No. **6,473,411**), hereinafter referred to as **Kumaki**.

a) **In Regarding to Claim 4/2:** **Perkins disclosed** all aspects of this claim as set forth in claims 1-2.

Perkins further disclosed said location information server updates information about correspondence between the IP address of the moving mobile station and the IP address of the edge node supervising of the area visited by the moving mobile station (*see col.15 lines 3-5*).

Perkins failed to explicitly disclose wherein when said mobile station moves from the supervisory area of an old edge node to the supervisory area of a new edge node, said moving

mobile station notifies said location information server of its own IP address and the IP address of the new edge node.

Kumaki explicitly disclosed such when said mobile station moves from the supervisory area of an old edge node to the supervisory area of a new edge node, said moving mobile station notifies said location information server of its own IP address and the IP address of the new edge node (*see Fig.12, abstract, col.3 lines 8-19 and col.30 lines 11-47*).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such when said mobile station moves from the supervisory area of an old edge node to the supervisory area of a new edge node, said moving mobile station notifies said location information server of its own IP address and the IP address of the new edge node as taught by Kumaki with Perkins, in order to provide proper handoff services for moving mobile stations from one area to another. The motivation for doing so would have been to provide enhanced services to Perkins. Therefore, it would have been obvious to combine Kumaki and Perkins the invention as specified in this claim.

b) In Regarding to Claim 17: Perkins disclosed all aspects of this claim as set forth in claim 1.

Perkins further disclosed said routing information includes information about correspondence between the IP address of the mobile station and the transmission route (*see Fig.2: block 20a, MH (the IP addresses of mobile station), col.8 line 30-col.9 line 1: Route Data and recorded route (transmission route)*); and

said routing nodes carry out the routing of the received data in accordance with the IP address of the mobile station added to the received data and the routing information (*col.6 line 39-col.7 line 54*).

Perkins failed to explicitly disclose wherein each of said edge nodes receives data which is transmitted by a mobile station visiting its own supervisory area and to which the IP address of the mobile station is added, and transmits the data to said routing node.

Kumaki explicitly disclosed such wherein each of said edge nodes receives data which is transmitted by a mobile station visiting its own supervisory area and to which the IP address of the mobile station is added, and transmits the data to said routing node (*see Fig.5 and col.32 line 57-col.33 line 28*).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such wherein each of said edge nodes receives data which is transmitted by a mobile station visiting its own supervisory area and to which the IP address of the mobile station is added, and transmits the data to said routing node as taught by Kumaki with Perkins, in order to provide proper handoff services for moving mobile stations from one area to another. The motivation for doing so would have been to provide enhanced services to Perkins. Therefore, it would have been obvious to combine Kumaki and Perkins the invention as specified in this claim.

Allowable Subject Matter

8. **Claims 3, 4/3, 5/2, 5/3, 7, 8/6, 8/7, 12-16, 18 and 19** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Examiner Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony T Ton whose telephone number is 703-305-8956. The examiner can normally be reached on M-F: 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W Olms can be reached on 703-305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ATT
6/14/2004


Phirin Sam